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AIR FILTERING DEVICE

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CROSS REFERENCE TO RELATED APPLICATIONS

This is a continuation of U.S. Application Serial No. 10/211,092 filed August 2, 2002 which is a continuation of International Application PCT/US00/13531 with an international filing date of May 18, 2000.

Field of the invention

The present invention relates to air filtering devices for removing malodor and ethylene from the air. Such devices are useful for example for storing and preserving food in closed compartments such as refrigerators.

Background

Nowadays, refrigerators have become a common appliance in virtually every household and typically are used for storage and preservation of food in particular of fresh food such as fruits, vegetables, dairy products, and the like. It is desirable to keep the food items fresh as long as possible in the refrigerator.

It is a well known problem that many food items tend to release malodors into the air which are then captured in the limited air space in a refrigerator. Not only are these malodors unpleasant and offensive to the user of the refrigerator, they can also have a negative impact on the quality of other foods in the refrigerator. For example, it is known that some foods emit strong odors (e.g. fish, boiled eggs, onions, etc.) and that these odors can transfer to other nearby foods and hurt the taste and freshness of those foods. A common example is transfer of odors into an open container of orange juice or of milk resulting in a noticeable degradation in their taste. It is also well known that malodors from some vegetables (onions, garlic) can transfer to other foods stored within a vegetable